

**FINDING OF SUITABILITY
FOR EARLY TRANSFER
(FOSET)**

**ST. LOUIS ARMY AMMUNITION PLANT (SLAAP)
ST. LOUIS, MISSOURI**

FEBRUARY 2004

**HEADQUARTERS, DEPARTMENT OF THE ARMY
BASE REALIGNMENT AND CLOSURE
ATLANTA FIELD OFFICE
FORT MCPHERSON, GEORGIA**

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**FINDING OF SUITABILITY FOR EARLY TRANSFER
FOR THE
ST. LOUIS ARMY AMMUNITION PLANT
ST. LOUIS, MISSOURI**

1.0 BACKGROUND

St. Louis Army Ammunition Plant (SLAAP) is a Government-Owned facility located at 4800 Goodfellow Boulevard, St. Louis, Missouri and was originally part of the St. Louis Ordnance Plant. The St. Louis Ordnance Plant was constructed in 1941-42 on 276 acres and was at that time the largest ammunition plant in the world. In 1944, 21-acres of the plant were converted from small arms munitions production to 105-mm Howitzer shell production and this area was designated as SLAAP. After WW II, the plant was placed in a standby status. During 1951-54, the plant was reactivated to support the Korean Conflict and thereafter placed on standby status after cessation of hostilities. Again during 1966-70, the plant was reactivated to support the Viet Nam Conflict and thereafter placed on standby status after cessation of hostilities. The plant is currently vacant and only 17.8905 acres remain in federal ownership. Approximately 3 acres of SLAAP was used to develop Interstate 70.

2.0 PURPOSE

The US Department of the Army (Army) has declared to the US General Services Administration that SLAAP, hereinafter sometimes referred to as the "Property", is excess to its needs, making the facility available for disposal. For purposes of convenience herein, the United States of America will hereinafter sometimes be referred to as the "Government" or "Grantor".

When a federal agency transfers to another non-federal person or entity real property on which hazardous substances are known to have been released or disposed of or stored for one year or more, the government deed must contain a covenant warranting that all remedial action necessary to protect human health and the environment has been taken before the date of the transfer, 42 U.S.C. 9620(h)(3)(A). However, for federal property that has not been listed on the National Priorities List (NPL), Section 120(h)(3)(C) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. 9620(h)(3)(C), authorizes the Governor of the State where the real property is located to approve the deferral of the CERCLA Covenant requirement, upon the satisfaction of certain enumerated statutory conditions. SLAAP is not listed on the NPL.

In accordance with with 42 U.S.C. 9620(h)(3)(C), the purpose of this Finding of Suitability for Early Transfer (FOSET) is to document the suitability of SLAAP for transfer prior to completion of all remedial action.

3.0 DESCRIPTION OF PROPERTY, INTENDED REUSE AND ASSOCIATED RISK

3.1 Description of Property

SLAAP currently comprises approximately 18 acres, located in the northwestern section of the City of St. Louis, Missouri. The Property is bounded on the west by Goodfellow Boulevard, on the south by the PURO Chemical Division, and on north and east by Interstate Highway 70 area. Three sides of the property are flanked by industrial properties, and directly across Interstate 70 is a residential area. See Enclosure 2, site maps of SLAAP outlining the boundaries of the property.

The property is more definitively described in the site-wide Environmental Baseline Survey (EBS) for SLAAP, dated 28 December 2000, which is available for public review at the following location: St. Louis Development Corporation, 1015 Locust Street, Suite 1200, St. Louis, Missouri 63101. The Property originally contained twenty-three buildings that were used for either industrial or administrative purposes. Ten of these building were subsequently demolished. A listing of the demolished buildings and existing buildings is at Enclosure 4.

All Property requiring further remediation, as determined by the Army and the Missouri Department of Natural Resources (MDNR), is subject to the covenant deferral request.

3.2 Intended Reuse

SLAAP has been a federal enclave utilized for industrial use since 1941. In anticipation of the transfer of SLAAP to private ownership, the Land Clearance for Redevelopment Authority and the City of St. Louis, Missouri has approved/will approve a Redevelopment Plan for SLAAP that contemplates a light industrial or commercial utilization of the Property as defined by the City of St. Louis Planning and Urban Design Agency, Missouri law, and St. Louis City planning and zoning ordinances. The deed restrictions to be imposed on the Property will be based on a light industrial or commercial usage, and be appropriate to: (1) protect human health and the environment; and, (2) ensure that required remedial investigations, response action, and oversight activities will not be disrupted. It is anticipated that the response actions to be conducted at the site will achieve cleanup levels appropriate for eventual light industrial or commercial use of the property.

3.3 Associated Risk

The Army, the United States Environmental Protection Agency – Region 7 (EPA) and MDNR agree that the property is suitable for transfer for the use intended by the transferee, and that the intended use is consistent with protection of human health and the environment. In particular this is because the transferee's and any subsequent transferee's use will be to primarily engage in environmental characterization and remediation activities at the property, and there will be restrictions in the form of institutional controls on the use of the property by the transferee placed in the deed by

the Army to protect human health and the environment during such post-transfer activities. In addition, any post-transfer activities by the transferee and any subsequent transferee that do not involve environmental characterization and remediation activities but do involve ground disturbance or subsurface water activities will only be permitted with the authorization of MDNR. Finally, pursuant to a consent order(s) that will be negotiated between the transferee, sub-transferee and MDNR, only cleanup remedies that will be protective of human health and the environment will be instituted.

3.4 Future Remediation

3.4.1. While the Army is ultimately responsible for ensuring that any and all necessary response actions are taken at SLAAP for releases that are attributable to the Army, it is anticipated that the transferee and/or any sub-transferee will perform the majority, if not all, of the response actions necessary to support the intended reuse of SLAAP in accordance with the Consent Order(s) discussed in paragraph 3.4.2, below.

3.4.2 MDNR Consent Order(s). Prior to completing the transfer of SLAAP by the federal government to a non-federal entity, the transferee and/or sub-transferee will enter into a consent order(s) with the MDNR outlining the investigation and remediation to be completed on the property by the transferee and/or sub-transferee. The Consent Order(s) will identify the scope of the transferee's and/or sub-transferee's investigation and remediation responsibilities, cleanup standards, and requirements for environmental remediation insurance. The transferee's and/or sub-transferee's remediation actions will be performed in accordance with the applicable federal and state laws and will be subject to oversight by MDNR.

The Army hereby acknowledges that the early transfer of SLAAP pursuant to this FOSET is conditioned upon the prior execution of the MDNR Consent Order(s) discussed above.

4.0 SUMMARY OF ENVIRONMENTAL CONDITIONS OF THE PROPERTY

Due to excessive Polychlorinated Biphenyls (PCB) contamination resulting from machining processes, Building 3 was demolished in January 2003, and PCB contaminated soil was removed from the area under the building. Inspections of the concrete flooring in Buildings 1, 2, 4 and 5 found oil stains from plant operations, and test results indicated elevated levels of PCBs. The production equipment in Buildings 1, 2, 4 and 5 has been removed. There are, however, small electrical components and switchgear connected to the superstructure of Buildings 2 and 4 that could potentially contain PCBs.

The low yield of the groundwater monitoring wells, measured during groundwater sampling activities, indicates that the saturated formations in the subsurface are not capable of producing sufficient quantities of water for use as a drinking water supply. Due to its limited yield capability, and the City of St. Louis prohibition against constructing domestic water supply wells, it is not likely that the perched groundwater

will be used as a drinking water source. The Army has not completed its risk evaluation of the potential exposure impacts from direct contact with groundwater or exposure from vapors by workers in trench excavations; however, the Risk Assessment report should be completed by February 2004.

Groundwater samples collected from the original seven site-wide monitoring wells installed during the EBS did not contain concentrations of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals, explosives, PCBs, or perchlorates that exceed Cleanup Levels for Missouri (CALM) groundwater target concentrations. Groundwater samples from two additional investigation-area wells taken during the EBS in 1999 indicated that one well contained one VOC and the other contained nitrates and phosphorous in concentrations exceeding the CALM levels. Additional Sampling to support a Site Specific Environmental Baseline Survey (SSEBS) was conducted in November 2002 and May 2003 to include the installation of four additional groundwater monitoring wells. As part of the SSEBS sampling program, groundwater samples were collected from all thirteen shallow perched groundwater monitoring wells. None of these samples contained concentrations of explosives, PCBs, or perchlorates that exceeded the CALM groundwater target concentrations. All of the thirteen wells did, however, have concentrations of various SVOCs (up to six compounds) that exceeded the CALM levels; one well contained one VOC in excess of the CALM level; and one other well had a sample that exceeded the CALM target level for lead. The SSEBS report should be completed by February 2004.

Based on the inadequate groundwater production capability of the surficial aquifer, relatively limited degree of contamination, existence of a local ordinance prohibiting the construction of domestic water supply wells, and the non-residential use restrictions associated with this site, the sparse groundwater underlying SLAAP is not believed to present a risk to human health and the environment. However, in order to further restrict access to the underlying surficial groundwater and fully protect the deep aquifers underlying SLAAP from the inadvertent migration of contamination from the upper saturated zone, a groundwater access restriction will be placed on this property as outlined in paragraph 1.6 of Enclosure 1.

The environmental activities at SLAAP have been coordinated with and overseen by the MDNR and, to the extent required by law, by the EPA.

5.0 ADJACENT HAZARDOUS CONDITIONS

SLAAP is adjacent to the former St. Louis Ordnance Plant, Goodfellow Boulevard and Interstate 70. Based on observations of present adjoining property usage, no sources of adjacent off-site contamination could be identified that might adversely impact SLAAP. Environmental conditions on property adjacent to SLAAP do not present an environmental hazard that would otherwise affect the ability of the Government to transfer the Property for non-residential use.

6.0 APPROVED SCHEDULE FOR COMPLETION OF CHARACTERIZATION AND REMEDIATION

The Army and MDNR have agreed on a schedule for environmental characterization and remediation, which is attached and incorporated by reference as Enclosure 7. It is the intention of the Army and MDNR that this schedule or any other revised schedule approved by MDNR will be implemented by the transferee and/or any sub-transferee in accordance with the MDNR Consent Order(s) as discussed in paragraph 3.4 above. Further, the Army and MDNR agree that any remediation will be subject to the institutional controls that will be placed in the deed as discussed in paragraph 3.3 above.

7.0 REGULATORY/PUBLIC COORDINATION

The EPA, the MDNR, and the public were notified of the initiation of this FOSET and given the opportunity to review the document and provide comments. The public was notified on 18 September 2003 of the proposed transfer by publication of an announcement in the Saint Louis American Newspaper, the Saint Louis Business Journal, and the St. Louis Post-Dispatch, newspapers of general circulation in the vicinity of the property, and provided an opportunity to submit written comments on the suitability of the property for transfer prior to completion of all necessary remedial action. Regulatory and public comments received during the FOSET development were reviewed and incorporated as appropriate. A copy of the regulatory/public comments received and the Army's responses to them are attached to this FOSET as enclosures 8 and 9, respectively. In addition, a public meeting to address the proposed early transfer of SLAAP was conducted on 23 October 2003.

8.0 SUITABILITY DECLARATION

As the Department of the Army official authorized to make such determination, I, the undersigned, conclude that all Department of the Army requirements to reach a finding of suitability for early transfer of the Property have been met subject to the reservations, restrictions, covenants and controls discussed in this FOSET and its attachments.

Subject to and in reliance upon the covenants, conditions, and restrictions set forth in this FOSET, the Army has determined that the Property may be transferred in its present condition for non-residential use purposes in accordance with the city's plans

for future redevelopment without causing an unacceptable risk to human health and the environment and without interfering with the on-going SLAAP environmental restoration program.

Date

RAYMOND J. FATZ
Deputy Assistant Secretary of the Army
(Environment, Safety, and Occupational Health)
OASA (I&E)

Enclosures:

1. Environmental Protection Provisions
2. Site Maps
3. List of Environmental Documentation
4. Description of Property
5. Notification of Hazardous Substance Storage, Release, or Disposal
6. Notification of Petroleum Product Storage, Release, and Disposal
7. Approved Schedule for Completion of Characterization and Remediation
8. Regulatory and Public Comments
9. Response Summary to Comments

ENCLOSURE 1

ENVIRONMENTAL PROTECTION PROVISIONS

1.0 CONTENTS OF DEED OR TRANSFER AGREEMENT:

1.1 Contents of Deed

As required by CERCLA Section 120(h)(3), the United States shall include the following or substantially similar language in the deferred covenant deed.

1.1.1 Notice of Hazardous Substance Activity.

Pursuant to Section 120(h)(3)(A)(i) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (CERCLA)(42 U.S.C. §9620(h)(3)(A)(i)), and based upon a complete search of agency files, the United States gives notice that Enclosure 5 provides the following information: (1) the type and quantity of hazardous substances that were known to have been released or disposed of or stored for one year or more on the Property; (2) the time such storage, release or disposal took place; and (3) a description of remedial action taken, if any.

1.1.2 CERCLA Covenant.

Grantor warrants that all corrective, remedial, or response actions necessary to protect human health and the environment shall be the responsibility of the Grantor, with respect to any hazardous substance remaining on the property as a result of storage, release, or disposal prior to the date of transfer. Grantor warrants that it shall take any additional response action found to be necessary after the date of this conveyance regarding hazardous substances located on the Property on the date of this conveyance. On ultimate completion of the environmental remediation of the Property, the United States shall execute and file in the Records of the City of St. Louis the CERCLA Covenant under 42 U.S.C. § 9620(h)(3)(A)(ii).

This covenant shall not apply:

(1) in any case in which Grantee, its successor(s) or assign(s), or any successor in interest to the Property or part thereof is a Potentially Responsible Party with respect to the Property immediately prior to the date of this conveyance; or

(2) to the extent that such additional response action or part thereof found to be necessary is the result of an act or failure to act of the Grantee, its successor(s) or assign(s), or any party in possession after the date of this conveyance that either:

(a) results in a release or threatened release of a hazardous substance(s) that was not located on the Property on the date of this conveyance; or

(b) causes or exacerbates the release or threatened release of a hazardous substance(s) the existence and location of which was known and identified to the applicable regulatory authority as of the date of this conveyance; or

(c) in the case of a hazardous substance(s) previously unknown by Grantor and Grantee as of the date of this conveyance but which is hereafter discovered by Grantee, its successor(s) or assign(s), or any party in possession and where after such discovery, Grantee, its successor(s) or assign(s), or any party in possession thereafter causes or exacerbates a release or threatened release of such hazardous substance(s).

In the event Grantee, its successor(s) or assign(s), seeks to have Grantor conduct any additional response action, and, as a condition precedent to Grantor incurring any additional cleanup obligation or related expenses, the Grantee, its successor(s) or assign(s), shall provide Grantor at least 45 days written notice of such a claim. In order for the 45-day period to commence, such notice must include credible evidence that:

- (1) the associated contamination existed prior to the date of this conveyance; and
- (2) the need to conduct any additional response action or part thereof was not the result of any act or failure to act by the Grantee, its successor(s) or assign(s), or any party in possession.

1.2 Access.

Grantor reserves a perpetual right and easement of access to all portions of the Property for environmental investigation, remediation or other corrective action. This reservation includes the right of access to and use of available utilities at reasonable cost to Grantor. These rights shall be exercisable in any case in which a remedial action, response action or corrective action is found to be necessary after the date of this conveyance, or in which access is necessary to carry out a remedial action, response action, or corrective action on adjoining property. Pursuant to this reservation, the United States of America, and its respective officers, agents, employees, contractors and subcontractors shall have the right (upon reasonable advance written notice to the record title owner) to enter upon the Property and conduct investigations and surveys, to include drilling, test-pitting, borings, data and records compilation and other activities related to environmental investigation, and to carry out remedial or removal actions as required or necessary, including but not limited to the installation and operation of monitoring wells, pumping wells, and treatment facilities. In addition, the State of Missouri, by and through its agencies and agents that are authorized to execute and enforce applicable environmental statutes and regulations, shall have the right (upon reasonable notice to the record title owner) to enter upon the Property to conduct any and all actions necessary to perform their lawful duties. Any such entry, including such activities, responses or remedial actions, shall be coordinated with record title owner and shall be performed in a manner that minimizes interruption with activities of authorized occupants.

1.3 Non-Residential Use Restriction

Grantee, for itself and its successors and assigns, covenants and agrees that the use of the Property shall be limited to non-residential use only, except for any office or similar use incidental to non-residential use if such incidental use is permitted by applicable federal, state and/or local regulatory authorities without requiring further environmental remedial action beyond that required for non-residential use. Prohibited residential uses include, but are not limited to, child care, pre-school, playground or any form of housing.

(1) In the event Grantee, its successor(s) or assign(s), desires to use the Property for any use other than non-residential use, then Grantee, its successor(s) or assign(s), shall perform all additional environmental remediation required by law and the applicable federal, state and/or local regulatory authorities for such other uses and shall further comply with all laws, rules, regulations and ordinances pertaining thereto, including but not limited to zoning requirements and the requirements of all applicable regulatory authorities.

(2) Any such additional remediation beyond non-residential use undertaken by Grantee, its successor(s) or assign(s), shall also be subject to the prior review and written approval of the applicable federal, state authorities, and/or local regulatory authorities. All costs associated with any such additional environmental remediation necessary to establish the property for other than non-residential use shall be the sole responsibility of Grantee, its successor(s) or assign(s).

(3) Upon written request by Grantee, its successor(s) or assign(s), and without any payment of funds by Grantor, Grantor, by and through the Department of the Army, agrees that upon completion of any additional remedial action performed by Grantee, its successor(s) or assigns(s), under this paragraph, to cooperate with Grantee, its successor(s) or assign(s), in any application, permit, order, or effort to obtain approval from appropriate regulators for other than non-residential use and the removal or revision of this restriction to be recorded in the records of the Recorder of Deeds for the City of St. Louis, Missouri.

1.4 Areas of Concern Ground Disturbance Restriction

As the Army and the MDNR complete the process to determine and identify those portions of the property that require specific restrictive land use controls, the following clause shall be incorporated into any transfer of such portions of the property as an institutional control established to protect human health and the environment:

(1) In the event Grantee, its successor(s) or assign(s), desires to use the Property for any use that would involve ground disturbance activities, then Grantee, its successor(s) or assign(s), shall perform all additional environmental remediation required by law and the applicable federal, state and/or local regulatory authorities for such other uses and shall further comply with all laws, rules, regulations and ordinances

pertaining thereto, including but not limited to zoning requirements and the requirements of all applicable regulatory authorities.

(2) In the event Grantee, its successor(s) or assign(s), desires to conduct or permit any use inconsistent with this restriction, prior to the completion of all necessary remedial action, then Grantee, its successor(s) or assign(s), at its sole cost and expense shall be required to obtain written permission of the applicable federal, state and/or local regulatory authorities for such other uses and shall further comply with all laws, rules, regulations and ordinances pertaining thereto, including but not limited to zoning requirements and the requirements of all applicable regulatory authorities.

(3) Upon written request by Grantee, its successor(s) or assign(s), and without any payment of funds by Grantor, Grantor, by and through the Department of the Army, agrees that upon completion of any additional remedial action performed by Grantee, its successor(s) or assigns(s), under this paragraph, to cooperate with Grantee, its successor(s) or assign(s), in any application, permit, order, or effort to obtain approval from appropriate regulators for the removal or revision of this restriction, subject to any necessary restrictions related to ground monitoring to be recorded in the records of the Recorder of Deeds for the City of St. Louis, Missouri.

1.5 Non-Interference with Response Action

Grantee covenants and agrees for itself, its successors and assigns and every successor in interest to the Property, or part thereof, that it or any party occupying the Property shall not disrupt or prevent the Army and its officers, employees, agents, contractors and subcontractors, and any other authorized party or entity from conducting required remedial investigations, response actions or oversight activities or from the proper and necessary construction, upgrading, operating, maintaining and monitoring of any groundwater treatment facilities or groundwater monitoring network on the Property or adjoining property.

1.6 Groundwater Access Restriction

Grantee, for itself and its successors and assigns, covenants and agrees that the successor(s) or assign(s) of Grantee, shall not construct or permit to be constructed any well, and shall not extract, utilize, consume or permit to be extracted, any water from any aquifer below the surfaces of the ground within the area identified in Enclosure 2, hereto, for the purpose of human consumption, or any other use, unless: (i) the groundwater has been tested and found to meet applicable standards for human consumption, and all other uses of the groundwater from the surficial aquifer underlying the site (including, but not limited to, dewatering, irrigation, heating/cooling purposes, and other industrial processes); (ii) is specifically authorized by all appropriate federal, state and local regulatory authorities; and, (iii) such well or extraction is acceptable to the MDNR. This groundwater use restriction specifically prohibits the excavation and disposal of contaminated soils with concentrations greater than the agreed upon

cleanup levels stipulated in the Consent Order between MDNR and the transferee unless and until prior written approval is obtained from MDNR.

The costs associated with obtaining use of such water, including, but not limited to, the costs of permits, studies, or analysis shall be the sole responsibility of the successors or assigns of Grantee.

2.0 Completion of Necessary Remediation:

As required by CERCLA section 120(h)(3)(C), the transfer agreement shall contain the following assurances.

2.1 Assurance of Remediation and Schedules

All necessary response actions shall be performed by the Army, or a third party on behalf of the Army, in accordance with schedules and work plans approved by the MDNR. In the event that the response actions are performed by a third party on behalf of the Army, the third-party transferee and/or sub-transferee will perform the response actions in accordance with the MDNR Consent Order(s) as discussed in paragraph 3.4 of the FOSET. Nothing contained in the Transfer Agreement shall relieve or release the United States of America, by and through the Department of the Army, from its responsibility under Federal, state and local environmental laws.

2.2 Adequate Assurance of Budget Requests or Alternate Funding

The Army shall submit on an annual basis through established channels, appropriate budget requests to the Director of the Office of Management and Budget that adequately address agreed upon schedules for investigation and completion of all necessary response actions. The actual amount available for such effort is subject to congressional authorizations and appropriations. However, in the event that a third party performs remedial obligations, Army's budget requests will be appropriately reduced.

3.0 Warranty

In accordance with CERCLA Section 120(h)(3)(C)(iii), when all response actions necessary to protect human health and the environment with respect to any substance remaining on the property on the date of transfer have been taken, the United States shall execute and deliver to the transferee an appropriate document containing a warranty that all such response action has been taken.

Federal Responsibility

In accordance with CERCLA Section 120(h)(3)(C)(iv), a deferral of the deed covenant that all remedial action necessary to protect human health and the environment has

been completed “shall not increase, diminish, or affect in any manner any rights or obligations” of the Army under CERCLA.

ENCLOSURE 2

Installation Location Map



0 1000 2000
SCALE IN FEET



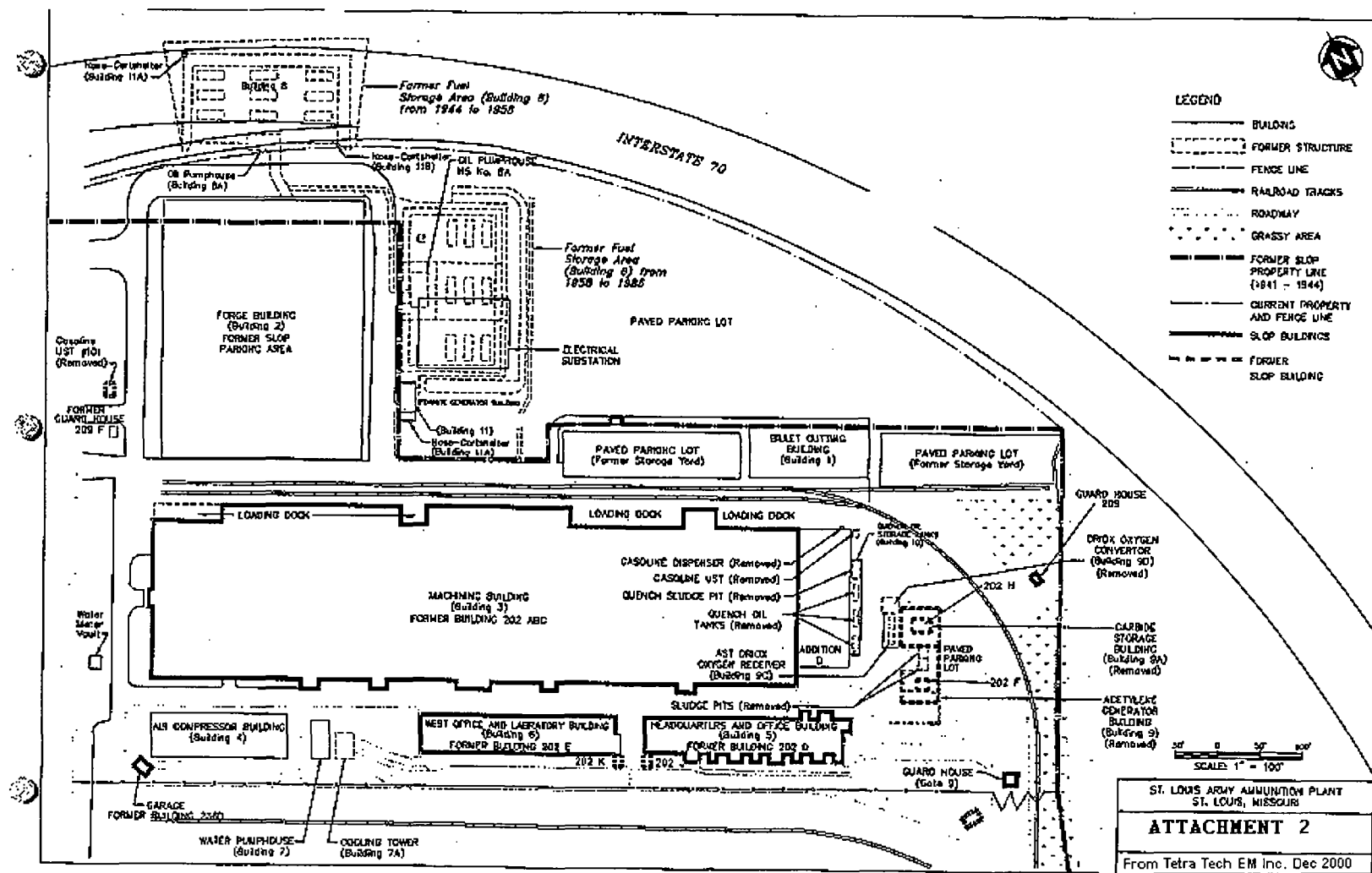
ST. LOUIS ARMY AMMUNITION PLANT
ST. LOUIS, MISSOURI

ATTACHMENT 1

From Tetra Tech EM Inc. Dec 2000

SOURCE: MODIFIED FROM USGS, CLAYTON, MISSOURI QUADRANGLE, 1969

SITE MAP



Note: Building 3 demolished due to PCB contamination.

ENCLOSURE 3

LIST OF ENVIRONMENTAL DOCUMENTATION PREPARED FOR THE ST. LOUIS ARMY AMMUNITION PLANT

Arrowhead Contracting, 2003. Draft Removal Action Report for Building 3 Demolition and PCB TSCA Waste at St. Louis Army Ammunition Plant. Prepared for the U.S. Army Corps of Engineers, Kansas City District.

Tetra Tech, 2000. Final Environmental Baseline Survey Report for the St. Louis Army Ammunition Plant. Prepared for the U.S. Army Aviation and Missile Command.

U.S. Army Environmental Hygiene Agency, 1993. Preliminary Assessment Screening No. 38-26-K19X-93 for St. Louis Army Ammunition Plant.

Final Report, Mitigation of PCB Contamination Building 3, St. Louis Army Ammunition Plant, St. Louis, Missouri.

ENCLOSURE 4

Description of Property

Building Number and Property Description	Year Built	Building Style and Construction	Process Materials Used
Bldg. 1 is 8769 square foot building that was used for billet cutting.	1944	This building is one story with steel framework and roof truss with corrugated asbestos siding.	Hydraulic fluids, degreasers, machine lubricants, and cooling oils.
Bldg. 2 is a 76,561 square foot building used for forging.	1944	This building is five stories high with a steel frame and roof trusses on reinforced concrete piers, corrugated asbestos siding and asbestos covered metal roof with metal clamshell.	Hydraulic oils, Machine lubricants, solvents (toluene), transformers.
Bldg. 3 was a former machining building. The square footage of this building was: Basement 37,000 sq ft 1 st Floor 168,000 sq ft 2 nd Floor 154,780 sq ft Penthouse 6,813 sq ft	1942	(Demolished)	Hydraulic oils, Machine lubricants, solvents (toluene), transformers and light ballasts.
Bldg. 4 is a building that served as the air compressor building. Basement: 2,772 sq ft First Floor: 8,450 sq ft	1944	It is one story with a basement (2,772 sq ft), steel frame, roof beams on reinforced concrete piers and spread footings, corrugated asbestos siding and roofing.	Hydraulic and motor oils. Transformers were in and around this building.

Building Number and Property Description	Year Built	Building Style and Construction	Process Materials Used
Bldg. 5 was used as a headquarters and office building. Basement: 1,153 sq ft First Floor: 11,662 sq ft Second Fl: 10,075 sq ft	1942	It is a two-story building with a basement, penthouse, steel frame, roof beams on reinforced concrete piers and spread footings, and with a precast concrete roof with insulation board underneath.	Transformers, solvents, primers, light ballasts, and oil storage.
Bldg. 6 is a building that was used for a laboratory and office space. Basement: 1,153 sq ft First Floor: 9,825 sq ft Second Fl: 10,477 sq ft	1942	The building is two stories with a basement, penthouse, steel frame, roof beams on reinforced concrete piers and spread footings, concrete slab roof with insulation board underneath.	Laboratory chemicals, solvents, hydraulic oil, transformers, and light ballasts.
Bldg. 7 is a 1,048 square foot water pump house.	1944	It is one story with concrete block walls, a reinforced concrete floor and a tar and gravel roof.	Chromium for the coolant water.
Bldg 7A was a former cooling tower.	1944	(Demolished)	Coolant water.
Bldg. 8 was the former fuel storage area.	1944	(Demolished)	Fuel and fuel oil.
Bldg. 8A was the former oil pump house.	1944	(Demolished)	Fuel and fuel oil.
Bldg. 9 was the former acetylene generation building.	1944	(Demolished)	
Bldg. 9A was the former carbide storage building.	1944	(Demolished)	Calcium carbide.
Bldg. 9B was the area of the former sludge pits.	1944	(Demolished)	
Bldg. 9C was the area of the former aboveground storage tank diox oxygen	1944	(Demolished)	Above ground storage tank with diox oxygen receiver.

Building Number and Property Description	Year Built	Building Style and Construction	Process Materials Used
receiver.			
Bldg. 9D was the former diox oxygen converter building.	1944	(Demolished)	Driox material.
Bldg. 10 was the quench oil storage tank area.	1944	(Demolished)	Cooling oil.
Bldg. 11 is 274 square foot and was the foamite generator building.	1957	This is a concrete block building resting on reinforced concrete foundation and a wooden roof.	Fire fighting foaming agents.
Bldg. 13 is a 292 square foot area used as a fire equipment storage.	UNK	This is a building on concrete slab with wood frame and roof.	Fire suppressing chemicals.
Bldg. 14 is a 121 square foot area used as a guard house.	UNK	This is a building on concrete slab with wood frame and roof.	None
Bldg. 15 is a 78 square foot area used as a guard house.	UNK	This is a building on concrete slab with wood frame and roof.	None
Bldg. 16 is a 42 square foot area used as a guard house.	UNK	This is a building on concrete slab with wood frame and roof.	None
Bldg. 17 is a 72 square foot area used as a guard house.	UNK	This is a building on concrete slab with wood frame and roof.	None
Bldg. 19 is an 81 square foot area used as a guard house.	UNK	This is a building on concrete slab with wood frame and roof.	None

Property Description	Year Built	Site Description	Process Materials Used
Railroad tracks	1944	Railroad tracks that serviced several of the building operations.	Hydraulic oil in switch gear.
Sewer lines	1944	Industrial sewer lines throughout the site which are connected to the City of St Louis.	None. (Note that all wastewater and storm water from the site is discharged through these lines.)

ENCLOSURE 5

Notification of Hazardous Substance Storage, Release, or Disposal

Building Number	Name of Hazardous Substance	Date of Storage, Release, or Disposal	Remedial Actions
Bldg. 1	PCB (in oils)	Potential Storage of oils from 1944 to 1969. No known releases.	No removal actions have been taken to date.
Bldg. 2	PCB (in oils)	Potential Storage of oils from 1944 to 1969. No known releases.	No removal actions have been taken to date.
Former Bldg. 3	PCB (in oils)	Storage and Release of oils containing PCBs during machining operations from 1942 – 1969.	PCB containing oil, asbestos, lead-based paint. Based on the extent of the PCB contamination throughout the building and beneath the foundation, the Army demolished the building and disposed of the PCB contaminated building materials and underlying soil in 2002.
Bldg. 4	PCB (in oils)	Potential Storage of oils from 1944 to 1969. No known releases.	No remedial actions
Bldg. 5	PCB (in oils)	Potential Storage of oils from 1944 to 1969. No known releases.	No remedial actions.
Bldg. 6	Solvents	No known releases.	No remedial actions.
Bldg. 7	Potassium Chromate	1944-1969 Operations No known releases	No remedial actions.
Former Bldg. 8	None	1944-1958 Operations No release of hazardous material.	No remedial actions needed.
Former Bldg 9	Calcium carbide	1944-1969 Operations No known releases	No remedial actions.
Former Bldg. 10	None		No remedial actions.
Bldg. 11	None		No remedial actions.
Bldg. 13	None		No remedial actions.
Bldg. 14	None		No remedial actions.
Bldg. 15	None		No remedial actions.
Bldg. 16	None		No remedial actions.
Bldg. 17	None		No remedial actions.
Bldg. 19	None		No remedial actions.

Enclosure 5 – Continued

The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Liability, and Compensation Act (CERCLA or "Superfund") 42 U.S.C. section 9620(h). This table provides information on the storage of hazardous substances for one year or more in quantities greater than or equal to 1000 kilograms or the hazardous substance's CERCLA reportable quantity (whichever is less). In addition, it provides information on the known release of hazardous substances in quantities greater than or equal to the substances CERCLA reportable quantity. See 40 CFR Part 373.

ENCLOSURE 6

Notification of Petroleum Product Storage, Release, and Disposal

Building Number	Name of Petroleum Product(s)	Date of Storage, Release, or Disposal	Remedial Actions
Bldg. 2	Gasoline	Located along the west side of bldg. 2. 11,549 gallon UST constructed of steel. Known as tank 101. Installed in 1945.	Soil borings and soil sampling were performed in February 1992. Soil contamination was detected. The UST was removed in 1993 and contaminated soil was remediated.
Former Bldg. 3	Quench oil - Non-PCB #6 bunker oil	Known as UST 15. Installed adjacent to the east wall of former bldg. 3. 15,335 gallon UST constructed of steel. Installed in 1945.	Soil borings and soil sampling were performed in February 1992. Soil contamination was detected. The UST was removed in 1993 and contaminated soil was remediated.
Former Bldg. 3	Quench oil - Non-PCB #6 bunker oil	Known as UST 17. Installed adjacent to the east wall of former bldg. 3. 15,220 gallon UST constructed of steel. Installed in 1945.	Soil borings and soil sampling was performed in February 1992. Soil contamination was detected. The UST was removed in 1993 and contaminated soil was remediated.
Former Bldg. 3	Quench oil - Non-PCB #6 bunker oil	Known as UST 87. Installed adjacent to the east wall of former bldg. 3. 14,100 gallon UST constructed of steel. Installed in 1945.	Soil borings and soil sampling were performed in February 1992. Soil contamination was detected. The UST was removed in 1993 and contaminated soil was remediated.
Former Bldg. 3	Gasoline	Known as UST 105. Installed adjacent to the east wall of former bldg. 3 in 1967. Replaced tank originally installed in 1945. 6,000 gallon UST constructed of steel.	Soil borings and soil sampling were performed in February 1992. Soil contamination was detected. The UST was removed in 1993 and contaminated soil was remediated.

Building Number	Name of Petroleum Product(s)	Date of Storage, Release, or Disposal	Remedial Actions
Former Bldg. 3	Quench oil - Non-PCB #6 bunker oil	Former sludge pit (bldg. 10). Installed adjacent to the east wall of former bldg. 3. 17,000-gallon area constructed of concrete. Used to collect quench oil. Installed in 1944.	Soil borings and soil sampling were performed in February 1992. Soil contamination was detected. The sludge pit was removed in 1993 and contaminated soil was remediated.
Former bldg. 8 tank farm area	Fuel (exact type not identified)	Contained 9 aboveground tanks. Located on the eastern side of bldg. 2. ASTs ranged in size from 16,000 gallons to 19,000 gallons. ASTs were enclosed by earthen berms and were used to store fuel for furnaces in bldg. 2.	The 9 ASTs were dismantled and removed in 1986. This area has been re-graded and paved over.

ENCLOSURE 7

Approved Schedule for Completion of Characterization and Remediation

Task Name	Duration	Start Date	Finish Date
Contingency Sampling (CS) Plan	45 days	12-Feb-03	17-Apr-03
Submit Draft Contingency Sampling (CS) Plan	0 days	12-Feb-03	12-Feb-03
Review Draft CS Plan	35 days	13-Feb-03	2-Apr-03
Submit Final CS Plan to Army	0 days	3-Apr-03	3-Apr-03
Review Final CS Plan	9 days	4-Apr-03	16-Apr-03
Submit Final CS Plan to Reg. Agencies	0 days	17-Apr-03	17-Apr-03
Authority to Proceed (ATP) Tasks	31 days	28-Mar-03	12-May-03
Submit Request for ATP for Field/Lab Tasks	0 days	28-Mar-03	28-Mar-03
Review Request for ATP for Field/Lab Tasks	8 days	31-Mar-03	9-Apr-03
Receive ATP for Field/Lab Tasks	0 days	10-Apr-03	10-Apr-03
ATP for completing (SSEBS) & (HHBRA)	23 days	10-Apr-03	12-May-03
Submit Request for ATP for completing SSEBS & HHBRA	0 days	10-Apr-03	10-Apr-03
Review Request for ATP for SSEBS & HHBRA	21 days	11-Apr-03	9-May-03
Receive ATP for completing SSEBS & HHBRA	0 days	12-May-03	12-May-03
Quality Assurance Project Plan (QAPP)	27 days	10-Apr-03	15-May-03
Submit Proposed Final (QAPP) Addendum	12 days	10-Apr-03	25-Apr-03
Review Proposed QAPP Addendum	15 days	28-Apr-03	15-May-03
Receive approval on Final QAPP Addendum	0 days	15-May-03	15-May-03
Field Work/Analytical Reports	35 days	10-Apr-03	27-May-03
Mobilize to SLAAP for Sample Layout/concrete coring	13 days	10-Apr-03	28-Apr-03
Field Sampling/Investigation	11 days	29-Apr-03	12-May-03
Complete Field Investigations	0 days	12-May-03	12-May-03
Develop Analytical Data Reports	11 days	13-May-03	27-May-03
Complete Analytical Data Reports	0 days	27-May-03	27-May-03
Quality Control Summary Report (QCSR)	42 days	28-May-03	25-Jul-03
Develop Draft QCSR	23 days	28-May-03	27-Jun-03
Submit Draft QCSR	0 days	27-Jun-03	27-Jun-03
Review Draft QCSR	9 days	30-Jun-03	10-Jul-03
Receive Comments on Draft QCSR	0 days	11-Jul-03	11-Jul-03
Reconcile Comments on Draft QCSR	9 days	14-Jul-03	24-Jul-03
Submit Final QCSR	0 days	25-Jul-03	25-Jul-03
SSEBS	135 days	28-Jul-03	30-Jan-04
Develop Draft SSEBS Report	24 days	28-Jul-03	28-Aug-03
Submit Draft SSEBS Report	0 days	29-Aug-03	29-Aug-03
Review Draft SSEBS Report	71 days	29-Aug-03	5 Dec-03
Receive Comments on Draft SSEBS Report	0 days	5-Dec-03	5-Dec-03
Reconcile Comments on Draft SSEBS Report	60days	8-Dec-03	27-Feb-04
Submit Final SSEBS Report	0 days	27-Feb-04	27-Feb-04
HHBRA	135 days	28-Jul-03	30-Jan-04
Develop Draft HHBRA	35 days	28-Jul-03	12-Sep-03
Submit Draft HHBRA	0 days	12-Sep-03	12-Sep-03
Review Draft HHBRA	60 days	15-Sep-03	5-Dec-03
Receive Comments on Draft HHBRA	0 days	5-Dec-03	5-Dec-03
Reconcile Comments on Draft HHBRA	60 days	8-Dec-03	27-Feb-04
Submit Final HHBRA	0 days	27-Feb-04	27-Feb-04

Task Name	Duration	Start Date	Finish Date
BUILDING 2 SCREENING STUDY	133 days	3-Jun-03	4-Dec-03
Bldg 2 Screening Plan	64 days	3-Jun-03	29-Aug-03
Coordination with MDNR	19 days	3-Jun-03	27-Jun-03
Award Contract to Environmental Contractor	0 days	3-Jul-03	3-Jul-03
Develop Bldg 2 Screening Study Work Plan	30 days	7-Jul-03	15-Aug-03
Submit Draft Bldg 2 Workplan for Screening Study	0 days	15-Aug-03	15-Aug-03
Regulatory Rvw of Bldg 2 WP Screening	5 days	18-Aug-03	22-Aug-03
Receive comments on Bldg 2 WP Screening	0 days	22-Aug-03	22-Aug-03
Address Regulatory Comments	5 days	25-Aug-03	29-Aug-03
Submit Work Plans for Screening Study	0 days	29-Aug-03	29-Aug-03
Bldg 2 Field Work	9 days	2-Sep-03	12-Sep-03
Field Work	9 days	2-Sep-03	12-Sep-03
Complete Field Work	0 days	12-Sep-03	12-Sep-03
Bldg 2 Screening Report	60 days	12-Sep-03	4-Dec-03
Analyze Samples by Lab	16 days	12-Sep-03	3-Oct-03
Evaluate Data for Bldg 2	10 days	6-Oct-03	17-Oct-03
Develop Draft Report	5 days	20-Oct-03	24-Oct-03
Submit Draft Report Bldg 2	0 days	24-Oct-03	24-Oct-03
Regulatory Rvw Draft Report for Bldg 2	20 days	24-Oct-03	20-Nov-03
Receive comments for Draft Report	0 days	20-Nov-03	20-Nov-03
Address Regulatory Comments on Draft Report	10 days	21-Nov-03	4-Dec-03
Submit Final Report for Screening Study	0 days	4-Dec-03	4-Dec-03
REMEDIATION	898 days	3-Nov-03	11-Apr-07
Feasibility Study (FS)	166 days	3-Nov-03	21-Jun-04
Draft Feasibility Study (FS) development	120 days	3-Nov-03	16-Apr-04
Submit Draft FS	0 days	16-Apr-04	16-Apr-04
Regulators Review Draft FS	30 days	19-Apr-04	28-May-04
Army develops Draft Final FS	16 days	31-May-04	21-Jun-04
Army submits Draft Final FS	0 days	21-Jun-04	21-Jun-04
Proposed Remedial Plan	75 days	22-Jun-04	4-Oct-04
Army prepares Draft Proposed Plan (PP)	30 days	22-Jun-04	2-Aug-04
Submit Draft PP	0 days	2-Aug-04	2-Aug-04
Regulators Review/Approve Draft PP	30 days	3-Aug-04	13-Sep-04
Army develops Draft Final PP	15 days	14-Sep-04	4-Oct-04
Army submits Draft Final PP	0 days	4-Oct-04	4-Oct-04
FS/PP for Public Comment and Finalize	80 days	5-Oct-04	24-Jan-05
Army conducts Availability Session	2 days	5-Oct-04	6-Oct-04
Public Comment Period	30 days	5-Oct-04	15-Nov-04
Army revises FS/PP to address Public	15 days	16-Nov-04	6-Dec-04
Army submits revised FS/PP	0 days	6-Dec-04	6-Dec-04
Regulatory Review of revisions	30 days	7-Dec-04	17-Jan-05
Army finalizes FS/PP	5 days	18-Jan-05	24-Jan-05
Army submits Final FS/PP	0 days	24-Jan-05	24-Jan-05
Record of Decision	75 days	25-Jan-05	9-May-05
Army develops Draft ROD	30 days	25-Jan-05	7-Mar-05
Army submits Draft ROD for regulatory review	0 days	7-Mar-05	7-Mar-05
Regulator Review/Approve Draft ROD	30 days	8-Mar-05	18-Apr-05
Army develops a Final ROD	15 days	19-Apr-05	9-May-05
Army submits Final ROD	0 days	9-May-05	9-May-05

Task Name	Duration	Start Date	Finish Date
Remedial Design/Remedial Action Plan (RD/RA)	442 days	10-May-05	17-Jan-07
Submit Draft Remedial Design/Remedial Action (RD/RA)	60 days	10-May-05	1-Aug-05
Army submits Draft RD/RA Plan	0 days	1-Aug-05	1-Aug-05
Regulators Review/Approve RD/RA Plan	30 days	2-Aug-05	12-Sep-05
Army Develops a Final RD/RA Plan	10 days	13-Sep-05	26-Sep-05
Army submits Final RD/RA Plan	0 days	26-Sep-05	26-Sep-05
Army Begins Implementation of RAP	7 days	27-Sep-05	5-Oct-05
Implementation of RAP	180 days	6-Oct-05	14-Jun-06
Army develops Draft RA Report	45 days	15-Jun-06	16-Aug-06
Army submits Draft RA Report	0 days	16-Aug-06	16-Aug-06
Regulator Review/Approve Draft RA Report	30 days	17-Aug-06	27-Sep-06
Army develops a Draft Final Report	15 days	28-Sep-06	18-Oct-06
Public Comment Period	30 days	19-Oct-06	29-Nov-06
Army develops Final RA Report	15 days	30-Nov-06	20-Dec-06
Regulatory Review of Final RA Report	20 days	21-Dec-06	17-Jan-07
Army submits Final RA Report	0 days	17-Jan-07	17-Jan-07
Closure Documents	60 days	18-Jan-07	11-Apr-07
Army develops Draft Closure Documents	15 days	18-Jan-07	7-Feb-07
Army submits Draft Closure Doc	0 days	7-Feb-07	7-Feb-07
Regulators Review/Approve Closure Documents	30 days	8-Feb-07	21-Mar-07
Army develops Final Closure Documents	15 days	22-Mar-07	11-Apr-07
Army submits Final Closure Documents	0 days	11-Apr-07	11-Apr-07

ENCLOSURE 8

Regulatory and Public Comments

ENCLOSURE 9

Response Summary to Comments

[Draft Model letter -- Governor's approval of an early transfer]

(Date)

Mr. Raymond J. Fatz
Deputy Assistant Secretary
Department of the Army
Office of the Assistant Secretary
Environment, Safety and Occupational Health (OASA-(I&E))
110 Army Pentagon
Washington, D.C. 20310-0110Address

RE: Finding of Suitability for Early Transfer Determination that St. Louis Army
Ammunition Plant, St. Louis, Missouri is suitable for an Early Transfer
Authority Transfer/Agreement to Covenant Deferral

Dear Mr. Fatz:

This letter is to notify you of my determination that the property known as the St. Louis Army Ammunition Plant, St. Louis, Missouri is suitable for transfer pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) at 42 U.S.C. §9620(h)(3)(C), and that I am in full agreement with the Army's decision to complete a "Deferred Covenant" transfer to non-federal ownership of the 18 acre tract at the above-referenced site. This determination and agreement is based upon a finding that—

1. the property is suitable for transfer for the uses intended by the proposed transferee, and the intended use is consistent with protection of human health and the environment;
2. the deed or other agreement proposed to govern the transfer between the United States and the transferee of the property contains adequate assurances that:
 - a) provide for any necessary restrictions on the use of the property to ensure the protection of human health and the environment;
 - b) provide that there will be restrictions on use necessary to ensure that required remedial investigations, response action, and oversight activities will not be disrupted;
 - c) provide that all necessary response action will be taken and identify the schedules for investigation and completion of all necessary response action as approved by the appropriate regulatory agency; and
 - d) provide that the Federal agency responsible for the property will submit a budget request to OMB that adequately addresses schedules for investigation and completion of all necessary response action, subject to congressional authorizations and appropriations.
3. the Federal agency requesting deferral has provided notice, by publication in a newspaper of general circulation in the vicinity of the property, of the proposed transfer and of the opportunity for the public to submit, within a period of not less than 30 days after the date of the notice, written comments on the suitability of the property for transfer;
4. the deferral and the transfer of the property will not substantially delay any necessary response action at the property;

[Draft Model letter -- Governor's approval of an early transfer]

5. the Army shall remain fully responsible for any remediation of hazardous substances that were on site as of the date of conveyance, whether known or unknown, that are necessary at the site notwithstanding any agreements that the Army may have with third parties; and,
6. it is my understanding that the FOSET submitted by the Army and any covenant deferral made pursuant to this agreement does not waive or impact in any way the State's right to recover any damages that may have been caused to natural resources.

This finding of suitability is made pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h)(3)(C)(i), 42 USC 9620(h)(3)(C)(i), and is based on a review of the Finding of Suitability for Early Transfer dated_____.

Sincerely,

Name
Governor of the State of Missouri

Cordially,

[Governor's signature]